

limitations under § 817.42 and the applicable State and Federal water quality standards for the receiving waters.

[48 FR 44051, Sept. 26, 1983, as amended at 53 FR 43607, Oct. 27, 1988; 59 FR 53030, Oct. 20, 1994; 73 FR 75884, Dec. 12, 2008]

EFFECTIVE DATE NOTE: At 51 FR 41962, Nov. 20, 1986, paragraph (b)(2) of § 817.46 was suspended, effective Dec. 22, 1986. At 73 FR 75883, Dec. 12, 2008, an amendment removed § 816.46(b)(2) and redesignated (b)(3) through (6) as (b)(2) through (5), but could not be incorporated because paragraph(b)(2) is suspended.

§ 817.47 Hydrologic balance: Discharge structures.

Discharge from sedimentation ponds, permanent and temporary impoundments, coal processing waste dams and embankments, and diversions shall be controlled, by energy dissipators, riprap channels, and other devices, where necessary, to reduce erosion, to prevent deepening or enlargement of stream channels, and to minimize disturbance of the hydrologic balance. Discharge structures shall be designed according to standard engineering design procedures.

§ 817.49 Impoundments.

(a) *General requirements.* The requirements of this paragraph apply to both temporary and permanent impoundments.

(1) Impoundments meeting the Class B or C criteria for dams in the U.S. Department of Agriculture, Soil Conservation Service Technical Release No. 60 (210-VI-TR60, Oct. 1985), "Earth Dams and Reservoirs," shall comply with the, "Minimum Emergency Spillway Hydrologic Criteria," table in TR-60 and the requirements of this section. The technical release is hereby incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, order No. PB 87-157509-AS. Copies can be inspected at the OSM Headquarters Office, Office of Surface Mining Reclamation and Enforcement, Administrative Record, 1951 Constitution Avenue, NW,

Washington, DC or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(2) An impoundment meeting the size or other criteria of § 77.216(a) of this title shall comply with the requirements of § 77.216 of this title and this section.

(3) *Design certification.* The design of impoundments shall be certified in accordance with § 784.16(a) of this chapter as designed to meet the requirements of this part using current, prudent, engineering practices and any design criteria established by the regulatory authority. The qualified, registered, professional engineer or qualified, registered, professional, land surveyor shall be experienced in the design and construction or impoundments.

(4) *Stability.* (i) An Impoundment meeting the SCS Class B or C criteria for dams in TR-60, or the size or other criteria of § 77.216(a) of this title shall have a minimum static safety factor of 1.5 for a normal pool with steady state seepage saturation conditions, and a seismic safety factor of at least 1.2.

(ii) Impoundments not included in paragraph (a)(4)(i) of this section, except for a coal mine waste impounding structure, shall have a minimum static safety factor of 1.3 for a normal pool with steady state seepage saturation conditions or meet the requirements of § 784.16(c)(3).

(5) *Freeboard.* Impoundments shall have adequate freeboard to resist overtopping by waves and by sudden increases in storage volume. Impoundments meeting the SCS Class B or C criteria for dams in TR-60 shall comply with the freeboard hydrograph criteria in the "Minimum Emergency Spillway Hydrologic Criteria" table in TR-60.

(6) *Foundation.* (i) Foundations and abutments for an impounding structure shall be stable during all phases of construction and operation and shall be designed based on adequate and accurate information on the foundation conditions. For an impoundment meeting the SCS Class B or C criteria for